NOx SIP Call Comments
326 IAC 10-4

Prepared by Hoosier Energy REC, Inc.
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I. **NOx Budget Trading Program**

Indiana should develop a viable NOx trading program to help minimize compliance cost for affected sources within the State. The program can be developed by adopting EPA's model NOx trading rule with specific attributes discussed below. In some cases Hoosier Energy recommends using the EPA model rule as proposed, in other areas where EPA allows state discretion, .

A. **Allowance Allocation Methodology**

Data base for allocating allowances

Under EPA's model rule, electric generating unit (EGU) allowances would be allocated based on the average of the highest two years of heat input between 1995 and 1997 multiplied by 0.15 lb/mmBtu (and adjusted, as appropriate to ensure state budget cap is not exceeded). IDEM is considering this as well as other options such as using heat input for a 1995 - 1999/2000 period. Hoosier Energy has evaluated the proposed allocations under the model rule and the state option for 1995-1999. Although Hoosier Energy's heat input for the highest average of 2 of 5 years (1995-1999) is 8% greater than its heat input for the highest 2 of 3 years (1995-1997), our proposed allowance allocation would be 2% less. Under the alternate approach the larger utilities that already have the most allowances seem to get more, whereas the smaller utilities receive fewer allowances. This is because the larger utilities heat input under the 5 year option(s) increases at greater rate than the smaller utilities.

Hoosier Energy urges IDEM to stay with the EPA model rule and use the highest two years of heat input between 1995 and 1997 in the allowance allocation methodology. Longer look back periods may be considered in future allocations.

Heat Input versus Electricity Output

For the initial allocation period, allowances should be allocated based on heat input. This is an easily understood metric and the data is readily available. Proponents of output based allowance allocations suggest this approach provides an incentive for energy efficiency and therefore other ancillary environmental benefits. However, it is premature at this time. CEMS monitoring protocols would need to be developed prior to implementing an output based allowance allocation system. An output based methodology may be considered for future allocation periods.

Hoosier Energy urges IDEM to use heat input for the initial period allowance allocation methodology.

Timing of allowance allocations
Indiana has opted to use the EPA model rule, which calls for annual allocations three years in advance. Issuing allowances for longer periods would increase certainty as to the quantity of allowances a source would obtain. Certainty would enable utilities to conduct more cost effective long-term planning, which in turn would help to create market based compliance strategies.

Hoosier Energy urges IDEM to allocate allowances for more than three or more years (up to five) at a time, three years in advance.

B. **New Source Set Aside**
IDEM has opted to use EPA's model rule new source set aside program which calls for a set aside of 5% the first three years, 2004 - 2006, and 2% each year thereafter. Hoosier Energy agrees with this approach, with the following clarifications.

1. New source set-aside allowances be allocated on a first come first serve basis, based on the date the source is issued an approved construction permit **and** becomes operational.
2. A new source should be required to return "unused" allowances, which can be used to fund new sources too low in line to receive allowances. If no new sources are waiting, unused allowances may be returned to existing sources on a pro rata basis.
3. New sources should be incorporated into the allocation process at the earliest opportunity, after it has completed two years of operation during an ozone control period. It's allocation should be based on the highest heat input (of the two years) multiplied by the lower of 0.15 lb/mmBtu or the source's permitted emission limit.

II. **Use and size of the Compliance Supplement Pool (CSP)**
The EPA model rule gives each state extra allowances which may be used as credit for early reduction (ERC) or for deferred compliance. A source may not use an allowance from the compliance supplement pool beyond the year 2005. 200,000 CSP credits are available for the entire 22 state SIP Call region. Indiana's allocation of CSP credits is 19,915.

Indiana should use CSP allowances exclusively to encourage credit for early reduction. Furthermore Indiana should look at creative way to increase the size of the pool within boundaries established by EPA. For example, preliminary information provided by IDEM indicates non-EGU affected sources may not need their full allocation under the proposed allocation methodology.

Hoosier Energy urges IDEM to explore the feasibility of using unused non-EGU allowances to expand the CSP and encourage early reductions by using the CSP exclusively for early reductions rather than deferred compliance.

III. **Allocation of allowances from the Compliance Supplement Pool**
IDEM should allocate allowances from the CSP for early reductions which take place prior to the 2004 ozone control period (2001, 2002, 2003). These allowances should be made available for use in the years 2004 and 2005 without further restrictions, e.g. flow control. Sources should be allowed to generate early reduction credits as follows:

- Installation of **new** NOx controls must be required as part of an application for early reduction credit.

- The difference between the previous actual NOx emission rate and the new (controlled) NOx emission rate should be used to calculate the quantity of early reduction credits. The actual emission rate is preferred over "most stringent current limit" to ensure real reductions are achieved. The actual calculation should be as follows:

  Heat Input Ozone Control Period * (Baseline NOx Emission Rate - Controlled NOx Emission Rate)/2000

  Heat Input Ozone Control Period = Heat Input from May 1st through September 30th for the year in which the early reductions took place, can be 2001, 2002 or 2003. May include more than one year.

  Baseline NOx Emission Rate = This is the average NOx emission rate in the ozone control period (for up to three years), prior to new controls being installed and placed into operation.

  Controlled NOx Emission Rate = The average NOx emission rate in the ozone control period for which the early reduction credit application is for.

  Example calculation for 2003 ERC application for a 500 MW unit installing an SCR.

  2003 ozone control period heat input = $20 * 10^6$ Btu's
  Avg. NOx emission rate 2001-2002 = 0.45 lb/mmBtu
  Controlled NOx emission rate = 0.08 lb/mmBtu

  ERC's generated = $20 * 10^6$ * (0.45-0.08)/2000
  3,700 tons (credits)
  (18.6% of EPA's CSP)

- ERC's should be allocated on a pro rata basis, as soon as practical after the end of the 2003 ozone control period is concluded. All ERC applications should be treated equally. In the event the CSP is oversubscribed, all early reduction credits should be discounted an equal amount so the pool is not exceeded.

- Applications for ERCs, based on projected reductions, may be submitted in advance of the actual reductions, by a date certain, say *July 1, 2001* (or some other date after the rule is finalized). All complete applications submitted by the specified date will be considered equally. IDEM may notify applicants what their ERC allocation may be, based on proposed data. Following the 2003 ozone control period, all operational data, i.e. heat input, emission rates, will be trued up and the allocations adjusted accordingly.

Hoosier Energy urges IDEM to develop allowance allocation protocols, which take into account the methodologies described above.

IV. **Energy Efficiency and Renewable Energy Set Aside**

Other incentives, external to the NOx trading program may be used to promote implementation of energy efficiency and renewable energy projects. Setting aside a portion (as much as 20% as been suggested by some interests) of the allowances will increase the uncertainty level and raise the cost of compliance. Furthermore it is trying to achieve energy policy through environmental regulation.

Hoosier Energy encourages IDEM to exclude energy efficiency and renewable energy set asides as a component of the state's NOx trading program.

V. **Opt-In Program**

EPA's model rule allows states to include an optional program that allows non-applicable sources to "opt-in" to the NOx budget trading program. An opt-in program will increase the coverage of the trading program and help stimulate the emergence of a viable market.

Hoosier Energy encourages IDEM to include an opt-in program for sources that currently are not in the NOx trading program.